

23 which converts positional information in said first
24 direction of said first stage outputted from said first
25 interferometer system to speed information and speed
26 controls said first drive mechanism so that the last
27 mentioned speed information may correspond to a constant
28 speed V/β , where β is a projection magnification of the
29 image of the pattern on said first object projected by said
30 projection optical system.--

REMARKS

Claim 171 corresponds to Claim 7 of U.S. Patent 5,796,469.

Claims 172-178 relate to the subject matter shown in Figs. 4, 5A and 5B, for example, of the present reissue application, and described in column 11, line 27, to column 13, line 27.

Claims 179-187 relate to the subject matter shown in Figs. 1, 2 and 3, for example, and described in column 8, lines 39-51; column 9, lines 1-11, 25-44, and 59-65; column 10, lines 23-42; and column 11, lines 11-60. More particularly, support for Claims 171-187 in this reissue application is apparent in the following explanation.

Claim 171

The first stage refers to stage 21 holding the original (reticle 7) and the second stage refers to stage 28 holding

the substrate (wafer 14).¹ As is apparent in Fig. 1, the first stage is provided above the second stage. It should be noted that the specification of the present reissue application describes that the main control system 23 performs positional control of the wafer side Y stage 28 and the reticle side fine adjustment stage 21. See, e.g., column 11, lines 61-63.

Claim 172

The scanning exposure method recited in the preamble has been described at length in previous remarks. See, e.g., page 3 of the Amendment filed May 11, 2000. The first object formed with a predetermined pattern refers to the reticle 7 and the second object refers to the wafer 14 shown in Figs. 5A and 5B. The plurality of defined regions on the second object 14 refer to regions 50A and 50B in Fig. 5B. Exposure onto region 50A is effected while the second object is moved in a predetermined direction (-X). After the exposure is finished, the second object is moved in a direction (Y) intersecting with the predetermined direction (-X) while it is moved in the predetermined direction. See column 11, lines 32-49, and column 12, lines 20-31.

Claims 173-175

Support for the preamble and the next paragraph of these claims is apparent from the discussion of Claim 172.

¹ Reticle stage 21 is supported on reticle stage 20, and wafer stage 28 is supported on wafer stage 27.

With regard to the last paragraph of Claim 173, see column 12, lines 27-31.

Claim 174

Support for the preamble and for the first step is apparent from the discussion of Claim 172. With regard to the second, third, and fourth steps see column 12, lines 27-31.

Claim 175

Support for the preamble and the next paragraph is apparent from the discussion of Claim 172. With regard to the last paragraph of Claim 175, see the inclined portion of the path beyond point BP in Fig. 5B.

Claim 176

Support for the preamble is apparent from the discussion of Claim 172. With regard to the next paragraph of Claim 176, see column 11, lines 42-45. With regard to the last paragraph of Claim 176, see the inclined portion of the path in Fig. 5B, and see column 12, lines 32-33.

Claim 177

Support for the preamble and the first step is apparent from the discussion of Claims 172 and 176. With regard to the second and third steps, see column 12, lines 27-29. With regard to the fourth step, see column 12, lines 32-34.

Claim 178

Support for the preamble and the next paragraph are apparent from the discussion of Claim 172. With regard to the last paragraph of Claim 178, see column 12, lines 27-31.

Claim 179

Support for the preamble is apparent from the discussion of Claim 172. With regard to the next paragraph, see reticle stage 21 and column 11, line 42. With regard to the last paragraph of Claim 179, see column 9, lines 60-63.

Claim 180

See column 9, lines 34-38.

Claim 181

It is apparent in Fig. 2 that the second interferometer system 36A and 36B has a plurality of measurement axes and that it measures rotational information of the movable body (reticle stage 21). See column 9, line 43.

Claim 182

See column 9, lines 55-65.

Claim 183

Support for the preamble and the next paragraph is apparent from the discussion of Claims 172 and 179. The first interferometer system refers to the laser interferometers 36A and 36B. The reflection surface refers to mirrors 34A and 34B.

Claim 184

The second interferometer system refers to the laser interferometer 35 and the reflection surface refers to the mirror 33.

Claim 185

See column 9, lines 61-63.

Claim 186

See column 9, lines 63-65.

Claim 187

Support for the preamble is apparent from the discussion of Claim 172. The first stage refers to reticle stage 21 on reticle stage 20, and the second stage refers to wafer stage 28 on wafer stage 27. The first interferometer system refers to laser interferometer 36A, and the second interferometer system refers to laser interferometer 48. The first drive mechanism refers to the drive 24, and the second drive mechanism refers to the drive 31. The projection optical system is shown at 13 in Fig. 1. The controller refers to the main control system 23. See column 11, lines 46-60.

This application now contains Claims 1-187. For the status of Claims 1-170, see page 15 of the Amendment filed May 11, 2000. Claims 171-187 are newly added.

A check for \$1,086.00 is attached in payment of the required fee for excess claims.

The Commissioner is hereby authorized to charge to Deposit Account No. 22-0585 any fees under 37 C.F.R. §§ 1.16 and 1.17 that may be required by this paper and to credit any overpayment to that Account. If any extension of time is required in connection with the filing of this paper and

has not been requested separately, such extension is hereby requested.

Respectfully submitted,

By: Nelson H. Shapiro
Nelson H. Shapiro
Reg. No. 17,095

NHS:lmb

Vorys, Sater, Seymour
and Pease LLP
1828 L Street, N.W.
Eleventh Floor
Washington, D.C. 20036-5109
Tel: (202) 467-8806

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